## **ATTACHMENT A**

Claims 1 - 10: (Cancelled)

11. (New) A process for meso-selective preparation of ansa-metallocene complexes of formula (I):

$$R^{1}$$
 $R^{1}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{2}$ 

which comprises reacting a ligand starting compound of formula (II):

$$\begin{bmatrix} R^2 \\ R^1 & T \\ \end{bmatrix}$$

$$\begin{bmatrix} p M^2 \end{bmatrix}^{++}$$

$$\begin{bmatrix} R^2 \\ \end{bmatrix}$$

$$\begin{bmatrix} P M^2 \end{bmatrix}^{-+}$$

with a transition metal compound of formula (III):

$$(LB)_y M^1 (OR^3) X_{x+1}$$
 (III)

where

R<sup>1</sup>, R<sup>1</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;

- R<sup>2</sup>, R<sup>2</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- R<sup>3</sup> is a bulky organic radical comprising at least 3 carbon atoms, and is bound to the oxygen atom via a nonaromatic carbon or silicon atom, and may be substituted by halogen atoms or further organic radicals comprising from 1 to 20 carbon atoms, and optionally comprise at least one heteroatom selected from the group consisting of Si, N, P, O and S;
- T, T' are identical or different and are each a divalent organic group comprising from 1 to 40 carbon atoms, and together with the cyclopentadienyl rings form at least one further saturated or unsaturated, substituted or unsubstituted ring system comprising from 5 to 12 atoms, where T and T' optionally comprises at least one heteroatom selected from Si, Ge, N, P, As, Sb, O, S, Se or Te;
- A is a bridge consisting of a divalent atom or a divalent group;
- M<sup>1</sup> is at least one lanthanide or an element of group 3, 4, 5 or 6 of the Periodic Table of Elements;
- X are identical or different and are each an organic or inorganic radical which is able to be replaced by a cyclopentadienyl anion;
- x is a natural number from 1 to 4;
- M<sup>2</sup> is an alkali metal, an alkaline earth metal, or a magnesium monohalide fragment;
- p is 1 when M<sup>2</sup> is a doubly positively charged metal ion, or 2 when M<sup>2</sup> is a singly positively charged metal ion or metal ion fragment;
- LB is an uncharged Lewis base ligand;

and

y is a natural number from 0 to 6.

12. (New) The process as claimed in claim 11, wherein the ansa-metallocene complexes of formula (I) is converted into an ansa-metallocene complex of formula (IV):

$$R^{1}$$
 $R^{1}$ 
 $R^{2}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{1}$ 
 $R^{2}$ 

where

- R<sup>1</sup>, R<sup>1'</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- R<sup>2</sup>, R<sup>2'</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- T, T' are identical or different and are each a divalent organic group comprising from 1 to 40 carbon atoms, and together with the cyclopentadienyl rings form at least one further saturated or unsaturated, substituted or unsubstituted ring system comprising from 5 to 12 atoms, where T and T' optionally comprises at least one heteroatom selected from Si, Ge, N, P, As, Sb, O, S, Se or Te;
- A is a bridge consisting of a divalent atom or a divalent group;
- M<sup>1</sup> is at least one lanthanide or an element of group 3, 4, 5 or 6 of the Periodic Table of Elements;
- X are identical or different and are each an organic or inorganic radical which is able to be replaced by a cyclopentadienyl anion; and
- x is a natural number from 1 to 4;

comprising reacting the ansa-metallocene complexes of formula (I) with at least one suitable elimination reagent in a subsequent reaction step.

- 13. (New) The process as claimed in claim 11, wherein
  - R<sup>1</sup>, R<sup>1</sup> are identical or different and are each a C<sub>1</sub>-C<sub>10</sub>-alkyl;
  - R<sup>2</sup>, R<sup>2</sup> are each hydrogen;
  - T, T' are identical or different and are each an unsubstituted 1,3-butadiene-1,4-diyl group or a 1,3-butadiene-1,4-diyl group substituted with from 1 to 4 R<sup>4</sup> radicals, where R<sup>4</sup> can be identical or different and are organic radicals having from 1 to 40 carbon atoms; and
  - A is ethylene, substituted ethylene or substituted silylene.
- 14. (New) The process as claimed in claim 12, wherein
  - R<sup>1</sup>, R<sup>1</sup> are identical or different and are each a C<sub>1</sub>-C<sub>10</sub>-alkyl;
  - R<sup>2</sup>, R<sup>2'</sup> are each hydrogen;
  - T, T' are identical or different and are each an unsubstituted 1,3-butadiene-1,4-diyl group or a 1,3-butadiene-1,4-diyl group substituted with from 1 to 4 R<sup>4</sup> radicals, where R<sup>4</sup> can be identical or different and are organic radicals having from 1 to 40 carbon atoms; and
  - A is ethylene, substituted ethylene or substituted silylene.
- 15. (New) The process as claimed in claim 11, wherein
  - $R^3$  is an alkyl radical branched in an  $\alpha$  position, and comprises from 4 to 40 carbon atoms, and is optionally substituted by at least one halogen atom or organic radical comprising from 1 to 10 carbon atoms;
  - M<sup>1</sup> is Ti, Zr or Hf;
  - X is halogen;
  - x is 2;

LB is a cyclic or acyclic ether or diether;
and
y is 1 or 2.

- 16. (New) The process as claimed in claim 12, wherein
  - $R^3$  is an alkyl radical branched in an  $\alpha$  position, and comprises from 4 to 40 carbon atoms, and is optionally substituted by at least one halogen atom or organic radical comprising from 1 to 10 carbon atoms;

M<sup>1</sup> is Ti, Zr or Hf;

X is halogen;

x is 2;

LB is a cyclic or acyclic ether or diether;

and

y is 1 or 2.

17. (New) The process as claimed in claim 11, wherein

M<sup>2</sup> is Li, Na, K, MgCl, MgBr, Mgl or Mg.

18. (New) The process as claimed in claim 12, wherein

M<sup>2</sup> is Li, Na, K, MgCl, MgBr, Mgl or Mg.

19. (New) A method for preparing ansa-metallocene complexes comprising reacting a metallocene complex with a transition metal compound of formula (III):

 $(LB)_y M^1 (OR^3) X_{x+1}$  (III)

20. (New)	) A transition	metal com	pound of t	the formula	(III):
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$$(LB)_y M^1 (OR^3) X_{x+1}$$
 (III)

where

- R<sup>3</sup> is a bulky organic radical comprising at least 3 carbon atoms, and is bound to the oxygen atom via a nonaromatic carbon or silicon atom, and may be substituted by halogen atoms or further organic radicals comprising from 1 to 20 carbon atoms, and optionally comprise at least one heteroatom selected from the group consisting of Si, N, P, O and S;
- M<sup>1</sup> is at least one lanthanide or an element of group 3, 4, 5 or 6 of the Periodic Table of Elements;
- X are identical or different and are each an organic or inorganic radical which is able to be replaced by a cyclopentadienyl anion;
- x is a natural number from 1 to 4;
- LB is an uncharged Lewis base ligand;

and

- y is a natural number from 0 to 6.
- 21. (New) A method for preparing ansa-metallocene complexes of formula (IV) comprising reacting a metallocene complex of formula (I):

$$R^{1}$$
 $R^{1}$ 
 $R^{2}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{2}$ 
 $R^{2}$ 

where

- R<sup>1</sup>, R<sup>1'</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- R<sup>2</sup>, R<sup>2</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- R<sup>3</sup> is a bulky organic radical comprising at least 3 carbon atoms, and is bound to the oxygen atom via a nonaromatic carbon or silicon atom, and may be substituted by halogen atoms or further organic radicals comprising from 1 to 20 carbon atoms, and optionally comprise at least one heteroatom selected from the group consisting of Si, N, P, O and S;
- T, T' are identical or different and are each a divalent organic group comprising from 1 to 40 carbon atoms, and together with the cyclopentadienyl rings form at least one further saturated or unsaturated, substituted or unsubstituted ring system comprising from 5 to 12 atoms, where T and T' optionally comprises at least one heteroatom selected from Si, Ge, N, P, As, Sb, O, S, Se or Te;
- A is a bridge consisting of a divalent atom or a divalent group;
- M<sup>1</sup> is at least one lanthanide or an element of group 3, 4, 5 or 6 of the Periodic Table of Elements;
- X are identical or different and are each an organic or inorganic radical which is able to be replaced by a cyclopentadienyl anion; and

## x is a natural number from 1 to 4;

with a transition metal compound.

22. (New) An ansa-metallocene complex of formula (I):

$$R^{1}$$
 $A$ 
 $M^{1}(OR^{3})X_{x-1}$  (I)

 $R^{2}$ 

where

- R<sup>1</sup>, R<sup>1'</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- R<sup>2</sup>, R<sup>2'</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- T, T' are identical or different and are each a divalent organic group comprising from 1 to 40 carbon atoms, and together with the cyclopentadienyl rings form at least one further saturated or unsaturated, substituted or unsubstituted ring system comprising from 5 to 12 atoms, where T and T' optionally comprises at least one heteroatom selected from Si, Ge, N, P, As, Sb, O, S, Se or Te;
- A is a bridge consisting of a divalent atom or a divalent group;
- $R^3$  is an alkyl radical branched in an  $\alpha$  position, and comprises from 4 to 40 carbon atoms, and is optionally substituted by at least one halogen atom or organic radical comprising from 1 to 10 carbon atoms;
- M<sup>1</sup> is Ti, Zr or Hf;

- X is halogen; and
- x is 2.
- 23. (New) A constituent of a catalyst system for polymerizing at least one olefin comprising an ansa-metallocene complex of formula (I):

$$R^{1}$$
 $R^{1}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{2}$ 

- R<sup>1</sup>, R<sup>1'</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- R<sup>2</sup>, R<sup>2'</sup> are identical or different and are each hydrogen or an organic radical having from 1 to 40 carbon atoms;
- R<sup>3</sup> is a bulky organic radical comprising at least 3 carbon atoms, and is bound to the oxygen atom via a nonaromatic carbon or silicon atom, and may be substituted by halogen atoms or further organic radicals comprising from 1 to 20 carbon atoms, and optionally comprise at least one heteroatom selected from the group consisting of Si, N, P, O and S;
- T, T' are identical or different and are each a divalent organic group comprising from 1 to 40 carbon atoms, and together with the cyclopentadienyl rings form at least one further saturated or unsaturated, substituted or unsubstituted ring system comprising from 5 to 12 atoms, where T and T' optionally comprises at least one heteroatom selected from Si, Ge, N, P, As, Sb, O, S, Se or Te;

- A is a bridge consisting of a divalent atom or a divalent group;
- M<sup>1</sup> is at least one lanthanide or an element of group 3, 4, 5 or 6 of the Periodic Table of Elements;
- X are identical or different and are each an organic or inorganic radical which is able to be replaced by a cyclopentadienyl anion; and
- x is a natural number from 1 to 4.